Support for the amendments

The amendments to the claims are fully supported in the claims as filed, and thus do not represent new matter.

Remarks

1. Claim rejections under 35 USC 112, second paragraph

(a) Claim 21 was rejected as indefinite based on the assertion that it is not clear how the nuclear image and the neurite image will be employed to measure neurite outgrowth. The patent office asserted that "the claims merely require two separate imagings of the nucleus and neurite, but does not identify how the images will be related to each other or will measure neurite outgrowth." The Applicants traverse this rejection.

Claim 21(b) recites obtaining a nuclear image and a neurite image. 21(c) recites that cell bodies are identified from the nuclear image. 21(d) recites identifying neurites (identified in the neurite image) extending from cell bodies (which were identified in the nuclear image as recited in 21(c)). 21(e) then recites specific features of the neurons that are determined and which provide a measure of neurite outgrowth. Thus, the patent office's assertion that the claim does not identify how the images will be related to each other or how they will be used to measure neurite outgrowth is incorrect. Nonetheless, the Applicants have amended the claim to obviate the rejection. Thus, the Applicants respectfully request reconsideration and withdrawal of this rejection.

- (b) Claim 21 was rejected as indefinite based on the assertion that "step d) recites the limitation 'the cell bodies from the neurite image' in step b). However, step b) does not include 'cell bodies." The patent office thus asserts that there is a lack of antecedent basis for "the cell bodies." The Applicants traverse this rejection. Step (d) recites that neurites extending from the cell bodies are identified from the neurite image; "cell bodies" has antecedent support in step (c), and thus there is no lack of antecedent basis. Nonetheless, the Applicants have amended the claim to clarify the issue. The Applicants note that this amendment in no way limits the scope of the claims. Thus, the Applicants respectfully request reconsideration and withdrawal of this rejection.
- (c) Claim 22 was rejected as indefinite based on the assertion the use of cell bodies is not clear because "it is not clear if applicant intends to mean cell bodies in claim 21 step c) or claim 21 step d)." The Applicants traverse this rejection. The term "cell bodies throughout claim 21 refers to the same cell bodies; thus, the cell bodies of step (c) are the cell bodies of step (d). The

Applicants do not understand the Patent Office's attempts to draw a distinction between cell bodies from steps (c) and (d). Nonetheless, the Applicants have amended claim 21 to clarify the issue. The Applicants note that this amendment in no way limits the scope of the claims. Thus, the Applicants respectfully request reconsideration and withdrawal of this rejection.

(d) Claim 28 was rejected as indefinite based on the assertion the use of cell bodies is not clear because "it is not clear if applicant intends to mean cell bodies in claim 21 step c) or claim 21 step d)." The Applicants traverse this rejection. The term "cell bodies throughout claim 21 refers to the same cell bodies; thus, the cell bodies of step (c) are the cell bodies of step (d). The Applicants do not understand the Patent Office's attempts to draw a distinction between cell bodies from steps (c) and (d). Nonetheless, the Applicants have amended claim 21 to clarify the issue. The Applicants note that this amendment in no way limits the scope of the claims. Thus, the Applicants respectfully request reconsideration and withdrawal of this rejection.

2. Claim rejections under 35 USC 103(a)

(a) Claims 21, 26-27, 29, and 30-32 were rejected as being obvious over the combination of Dow (Cytometry 25:7-81 (1996) in view of Lieske et al. (Neuroscience, 90:967-974, 1999) as supported by Wang et al. (Pure and Applied Chemistry 2001, 73(10)1599-1611).

In order to establish a *prima facie* case of obviousness the patent office must establish three criteria; 1) a suggestion or motivation found within the prior art or within the knowledge of one of skill in the art to combine or modify the references; 2) a reasonable expectation of success; and 3) the prior art references alone or in combination must teach or suggest *all* the claim limitations. MPEP § 706.02(j). The combination of the cited references does not teach all of the limitations of previously pending claim 21, and thus the combination of cited references is inadequate to support a prima facie obviousness rejection.

Nonetheless, claim 21 has been amended to incorporate the limitation of allowable claim 23, thus obviating the rejection. Therefore, the Applicants respectfully request reconsideration and withdrawal of the rejection.

(b) Claim 22 was rejected as being obvious over the combination of Dow (Cytometry 25:7-81 (1996) in view of Lieske (Clin. and Eptl. Pharmacol. and Physiol. 1995, 22:363-363) as supported by Wang et al. (Pure and Applied Chemistry 2001, 73(10)1599-1611) and further in view of Ranefall (Analyt. Cellul. Pathol. 15:145-156 (1997)). The Applicants traverse this rejection.

In order to establish a *prima facie* case of obviousness the patent office must establish three criteria; 1) a suggestion or motivation found within the prior art or within the knowledge of one of skill in the art to combine or modify the references; 2) a reasonable expectation of success; and 3) the prior art references alone or in combination must teach or suggest *all* the claim limitations. MPEP § 706.02(j). The combination of the cited references does not teach all of the limitations of previously pending claim 22, and thus the combination of cited references is inadequate to support a prima facie obviousness rejection.

Nonetheless, claim 21 (upon which claim 22 is dependent) has been amended to incorporate the limitation of allowable claim 23, thus obviating the rejection. Therefore, the Applicants respectfully request reconsideration and withdrawal of the rejection.

(c) Claim 28 was rejected as being obvious over the combination of Dow (Cytometry 25:7-81 (1996) in view of McFarlance (Clin. and Eptl. Pharmacol. and Physiol. 1995, 22:363-363) as supported by Wang et al. (Pure and Applied Chemistry 2001, 73(10)1599-1611) and further in view of Sano (Current Trends in Neurochemistry 1997, 1:27-40 (Abstract only)). The Applicants traverse this rejection.

In order to establish a *prima facie* case of obviousness the patent office must establish three criteria; 1) a suggestion or motivation found within the prior art or within the knowledge of one of skill in the art to combine or modify the references; 2) a reasonable expectation of success; and 3) the prior art references alone or in combination must teach or suggest *all* the claim limitations. MPEP § 706.02(j). The combination of the cited references does not teach all of the limitations of previously pending claim 28, and thus the combination of cited references is inadequate to support a prima facie obviousness rejection.

Nonetheless, claim 21 (upon which claim 21 is ultimately dependent) has been amended to incorporate the limitation of allowable claim 23, thus obviating the rejection. Therefore, the Applicants respectfully request reconsideration and withdrawal of the rejection.

Based on all of the above, the Applicants believe the claims are now allowable. If there are any questions or comments regarding this response, the Examiner is encouraged to contact the undersigned agent as indicated below.

Respectfully submitted,

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